

IN THE ABSTRACT OF THE DISCLOSURE:

Please amend the abstract as follows:

ABSTRACT

A method is provided to improve the adhesion between bonding pads and ball portions of gold wires to improve the reliability of a semiconductor device. About 1 wt.% of Pd is contained in gold wires for connection between electrode pads formed on a wiring substrate and electrode pads (exposed areas of a top layer wiring formed mainly of Al) formed on a semiconductor chip. In bonded portions between the electrode and ball portions of the gold wires, an interdiffusion of Au and Al is suppressed to prevent the formation of Au_4Al after ~~POT~~PCT (Pressure Cooker Test). Thus, a desired bonding strength is obtained even when the pitch of the electrode pads is smaller than ~~65 μm~~ 65 μm and the diameter of the ball portion is smaller than ~~55 μm~~ 55 μm or the diameter of the wire portion of each gold wire is not larger than ~~25 μm~~ 25 μm .